TOWN OF BRAINTREE

2016 Yearly Operational Plan

Submitted by:
Town of Braintree Department of Public Works

Prepared by:
Vegetation Control Service, Inc.

March 3, 2016

SUMMARY

A yearly operational plan (YOP) must be submitted to the Department of Agricultural Resources (DAR) every year herbicides are intended for use to maintain public ways. The YOP provides a detailed program for vegetation management including the methods used to identify target vegetation and sensitive areas, planned treatment methods, herbicides and herbicides mixtures and rates for the year.

A five year Vegetation Management Plan (VMP) will be available for review at the office of the Department of Public Works, Board of Health, Conservation Commission and Mayor.

Upon receipt of this YOP, the DAR publishes a notice in the *Environmental Monitor*. The Town must also provide a copy of the proposed YOP and *Environmental Monitor* notice to the Board of Health, Conservation Commission, and Mayor. The Department allows a 45-day comment period on the proposed YOP beginning with the publication of the notice and receipt of the YOP and *Environmental Monitor* notice.

Public notification of the herbicide application program is made at least 21 days prior to the treatment(s) by a separate notice (concurrent). This Notice is made to the Department of Agricultural Resources, Mayor, Board of Health, the Conservation Commission and the Public Water Supplier. A one page notice is also sent to the public water suppliers.

A newspaper notice will also be made at least 48 hours in advance of the start of the treatment program.

Any comments on this YOP should be made to the person designated herein as the person supervising the YOP or the person performing the treatment.

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APPENDICES

1. INTRODUCTION

In compliance with Commonwealth of Massachusetts' Rights-of-Way Vegetation Management Regulations (333 CMR 11.00) the Town of Braintree's YOP details our vegetation management program for 2016. This YOP is consistent with the terms and procedures set forth in Braintree's *2015-2019 Five-year Vegetation Management Plan* (VMP); with the Massachusetts Pesticide Control Act (Chapter 132B); with all pertinent clauses in Chapter 85 of the Acts of 2000; and with all acts and regulations that apply to public ways vegetation management.

Vegetation growing along curbing, within and around paved traffic islands, in cracks in the asphalt, under guiderails along roadways and in areas that cannot be mowed is of concern in Braintree. These areas, along with Poison Ivy and other public nuisance vegetation, can be effectively controlled with the use of herbicide applications.

These treatments will be done under the supervision of a certified applicator in compliance with the public way Integrated Vegetation Management (IVM) program and protocols described in Braintree's VMP.

An Integrated Vegetation Management program on public ways is a combination of cultural, physical, mechanical, and chemical management techniques that control undesirable vegetation in an ecologically sound manner. As with all IVM programs, this program is designed to maximize control of undesirable vegetation while minimizing any potential impact to the environment.

2. THE INDIVIDUALS THAT WILL SUPERVISE AND PERFORM THE HERBICIDE TREATMENT

Supervisor:

Daryn J. Brown
Director of Golf Operations
Braintree Municipal Golf Course
101 Jefferson Street
Braintree, MA 02184
(781) 843-9780 ext. 3

Herbicide Applicators:

Braintree Public Works Dept.
Town of Braintree
85 Quincy Ave.
Braintree, MA 02184

Northern Tree Service, Inc.
1290 Park Street,
Palmer, MA 01069

Vegetation Control Service Inc.
2342 Main Street
Athol, MA 01331

3. LOCATION OF INTENDED HERBICIDE TREATMENT(S)

For 2016, the primary treatment areas include, but are not limited to cracks in asphalt, along guiderails, along curbing, within and around paved traffic islands, between sidewalks and the adjacent curbing, and wherever public nuisance vegetation, particularly Poison Ivy is causing a public hazard.

Planned treatment areas and known sensitive areas are included in the map of Braintree included in Appendix A.

A Braintree street listing is also included in Appendix A to cover potential treatment locations for public nuisance and other vegetation posing a risk to public safety. Especially for Poison Ivy, predicting the location of all target vegetation along public ways in advance of the active growing season is not possible or practical. In an effort to limit the application of herbicides only to areas that require treatment, the town will, therefore, conduct patrols and treat only those areas in which vegetation poses a public nuisance and/or poses a safety risk to pedestrian or vehicular safety and which cannot be practically treated by the other methods listed in the VMP.

4. IDENTIFICATION OF TARGET VEGETATION

Target Vegetation:

Vegetation that poses a public nuisance and/or poses a safety risk to pedestrian or vehicular safety.

Nuisance Grass and Herbaceous Growth

In most instances grass is a desirable plant species. Along the shoulders of roads, grass growth is encouraged and maintained through mechanical mowing. However, in some instances, grasses and other herbaceous plants can be identified as targets in areas where they cause a safety

risk. These areas include, but are not limited to along curbing, cracks in asphalt, along guiderails, within and around paved traffic islands, and between sidewalks and the adjacent curbing.

Public Nuisance Vegetation

Public nuisance vegetation includes, but is not limited to poisonous and noxious plant species growing along public ways that pose a health hazard. Noxious vegetation poses a risk to safety and health because of heavy thorns, dense foliage and/or impenetrable stems; examples include but are not limited to Multiflora Rose, Common and Glossy Buckthorn, and Blackberries. Although not the only target species of concern, Poison Ivy is the dominant poisonous plant community along public ways that requires control.

Vegetation Posing a Risk to Safety

Vegetation that hampers visibility or impedes movement along public ways often poses a risk to public safety. M.G.L. Chapter 87, Section 5 authorizes tree wardens to have control of "all public shade trees, shrubs, and growths" along public ways. This includes woody plant species and invasive species. A short list of examples includes all tree species considered "street trees", all shrubs, vines and more specifically, invasive species, particularly Autumn Olive, Japanese Knotweed, Bittersweet and Multiflora Rose. Please note that only vegetation under 12 feet tall may be foliar treated.

5. DEFINITION, IDENTIFICATION AND TREATMENT OF SENSITIVE AREAS

The general definition of sensitive areas regulated by 333 CMR 11.04 is as follows:

> …any areas within Rights-of-Way, including No-Spray and Limited-Spray Areas, in which public health, environmental or agricultural concerns warrant special protection to further minimize risks of unreasonable adverse effects.

Protecting these environmentally sensitive sites is accomplished by defining specific sensitive areas and establishing treatment restrictions within their borders according to Table 1 below. These sensitive areas consist of no-spray zones in which herbicide use is prohibited, larger, limited spray areas where herbicide use is permitted following certain conditions, and areas that require special treatment recommendations.

Treatment in limited spray areas require the use of herbicides from the *Sensitive Area Materials List* available at: http://www.mass.gov/eea/agencies/agr/pesticides/rights-of-way-vegetation-management.html and following the application restrictions in 333 CMR 11.04; this includes applying "No more than the minimum labeled rate of herbicide for the appropriate site, pest, and application method."

TABLE 1: CONTROL STRATEGIES FOR SENSITIVE AREAS

Table Compiled by Jeffrey M. Taylor, Vegetation Control Service, Inc.

Sensitive Area	Limited Spray and No-Spray Areas (feet)	Control Method	Restriction Code
Public Ground Water Supplies	400'	Mechanical Only	None
Primary Recharge Area	Designated buffer zone or 1/2 mile radius	Mechanical, Recommended Herbicides*	24 months
Public Surface Water Supplies (Class A & Class B)	100'	Mechanical Only	None
	100'-400'	Recommended Herbicides	24 months
Tributary to Class A Water Source, within 400' upstream of water source	100'	Mechanical Only	None
	100'-400'	Recommended Herbicides	24 months
Tributary to Class A Water Source, greater than 400' upstream of water source	10'	Mechanical Only	None
	10'-200'	Recommended Herbicides	24 months
Class B Drinking Water Intake, within 400' upstream of intake	100'	Mechanical Only	None
	100'-200'	Recommended Herbicides	24 months
Private Drinking Water Supplies	50'	Mechanical Only	None
	50'-100'	Recommended Herbicides	24 months
Surface Waters	10'	Mechanical Only	None
	10'-100'	Recommended Herbicides	12 months
Rivers	10' from mean annual high water line	Mechanical Only	None
	10'-200'	Recommended Herbicides	12 months
Wetlands	10'	Mechanical Only	None
	10'-100' [with approved Wetlands Determination per 310 CMR 0.05(3)(a) & 310 CMR 0.03(6)(b)]	Low-pressure Foliar, CST, Basal, Recommended Herbicides	24 months
Inhabited Areas	100' (for high-pressure foliar only)	Recommended Herbicides	12 months
Agricultural Area (Crops, Fruits, Pastures)	100' (for high-pressure foliar only)	Recommended Herbicides	12 months
Certified Vernal Pools	10'	Mechanical Only when water is present	None
Certified Vernal Pool Habitat	10'-outer boundary of habitat	No treatment without approval	
Priority Habitat	No treatment outside the 4 foot paved road exemption without approval of the Natural Heritage Endangered Species Program (NHESP)		

*Massachusetts recommended herbicides for sensitive sites

Identification Methods

As appropriate, sensitive areas will be identified and marked in the field by trained and experienced individuals.

Two simple descriptions guide the complex identification of the *sensitive areas* defined in 333 CMR 11.04: *Readily identifiable in the field* and *Not readily identifiable in the field.* Readily identifiable in the field areas will be treated, identified and when appropriate, marked according to all applicable restrictions listed in 333 CMR 11.00. Not readily identifiable in the

field areas will likewise be treated and marked when appropriate, but they are identified by the use of data marked on maps and collected in the YOP and notification processes before the time of treatment.

The individual(s) assigned the task of identifying and treating sensitive areas in the field will use the appropriate sources and methods from the following list:

- Town maps, records and institutional knowledge
- Massachusetts Department of Environmental Protection water supply maps and/or GIS mapping layers available through MassGIS (http://www.mass.gov/mgis/)
- Water Department, Department of Agricultural Resources (DAR) and Board of Health maps and lists of identified private wells along the public ways
- Correspondence, meetings and input within the forty-five day YOP and twenty-one day municipal right-of-way notification letter review and comment periods and the 48 hour newspaper notification (under 333 CMR 11.06 & 11.07 and Chapter 85 of the Acts of 2000)
- Prior to treatments, an advance point person will verify, identify and where appropriate mark sensitive areas and any additional areas that may require special precautions
- USGS topographical maps
- Information from MassGIS
- When necessary, confidential information from NHESP
- The assistance of the Conservation Commission
- A copy of the YOP and VMP.

6. PROPOSED HERBICIDE TREATMENT METHODS

Braintree's VMP describes a number of proposed treatment methods, but for 2016 the herbicide program will consist of the following:

Chemical (Herbicide Application) Methods:

1. **Foliar Treatments:** the selective application of herbicides diluted in water, to the foliage of target vegetation. Two types of equipment for foliar treatments are used: Low volume and high volume. Both treatments use low pressure at the nozzle for applications. Foliar applications take place when leaves are fully developed in the spring until early fall.

    a. **Low volume foliar treatments** use a hand pump sprayer or squirt bottles. The herbicide solution is applied to lightly wet the target plant, not to the point of run-off.

    b. **High volume/low pressure foliar treatments** use truck or tractor mounted application equipment that delivers the herbicide solution through nozzles attached to a hose or boom-mounted equipment. The herbicide solution is sprayed to thoroughly wet the target vegetation using a water based herbicide mixture from a tank and pump on the application vehicle.

2. **Pre-emergent Treatments:** the use of pre-emergent herbicides using the same equipment described in the "foliar treatments" above. Pre-emergent applications are used where season long vegetation control requires "vegetation-free conditions" such as along curbing, sidewalks, under guiderails and on paved traffic islands. Usually, pre-emergent treatments are used in conjunction with foliar applications.

7. PROPOSED HERBICIDES, CARRIERS, ADJUVANTS AND RATES

Only Commonwealth of Massachusetts recommended herbicides listed below for use in sensitive areas—pursuant to 333 CMR 11.04 (1)(d) will be used throughout the town. Complete information on these products is included in Appendix B, Fact Sheets and Appendix C, Labels.

Table 2: Tank Mix #1 for Curbing, Cracks, Guiderail, Traffic Island Treatments (General Foliar Weed Control)

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration (per 100 gals. water)
Rodeo or Roundup Pro	Glyphosate	62719-324 or 524-475	2-5%
Oust XP	Sulfometuron Methyl	352-601 or 432-1552	10 oz (applied at a volume of 15-30 gals per acre)
Induce, Clean Cut, or equivalent surfactant[1]	not applicable	n.a.	0.125%-1%
Point Blank, 41A, Clasp, or equivalent drift retardant[1]	n.a.	n.a.	4-16 oz.
Carrier: Water	n.a.	n.a.	n.a.

Table 3: Tank Mix #2 for Poison Ivy, Noxious and Invasive Species

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration (per 100 gals. water)
Rodeo or Roundup Pro	Glyphosate	62719-324 or 524-475	2-5%
Escort XP	Metsulfuron-Methyl	352-439, or 432-1549	1.25-4 oz.
Induce, Clean Cut, MSO or equivalent surfactant[1]	not applicable	n.a.	0.125%-1%
Point Blank, 41A, Clasp or equivalent drift retardant[1]	n.a.	n.a.	4-16 oz.
Carrier: Water	n.a.	n.a.	n.a.

[1] Equivalent surfactants, drift retardants and basal oils will used in case those listed are no longer available or more effective alternatives become available.

Table 4: Tank Mix #3 for Poison Ivy

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration (per 100 gals. water)
Garlon 4 Ultra	Triclopyr	62719-527	2-4%
Induce, Clean Cut, MSO, or equivalent surfactant[1]	n.a.	n.a.	0.125%-1%
Point Blank, Clasp, or equivalent drift retardan[1]t	n.a.	n.a.	4-16 oz.

Table 5. Tank Mixes #4 for Low Volume Foliage Applications

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration (per 100 gals. water)
Rodeo or Roundup Pro	Glyphosate	62719-324 or 524-475	3-5%
Krenite S	Fosamine Ammonium	42750-247	6-10%
Escort XP	Metsulfuron-Methyl	352-439, or 432-1549	2-4 oz.
Polaris	Imazapyr	228-534	0.125%-.5%
Induce, Clean Cut, MSO, or equivalent surfactant[1]	n.a.	n.a.	0.125%-1%
Point Blank, Clasp, or equivalent drift retardant[1]	n.a.	n.a.	6-64 oz.

8. HANDLING, MIXING AND LOADING HERBICIDE CONCENTRATES

All herbicides will be handled, mixed and applied strictly in compliance with all applicable federal and state laws and regulations. All herbicide mixing will be done at the DPW, Golf Course or contractor's facilities and extreme care shall be exercised during all mixing, handling and loading in order to prevent careless spills or splashes. No herbicide concentrates will be mixed, handled or loaded on a public way within one hundred (100) feet of a sensitive area.

Although it is expected that all the mixed herbicide will be used, any remaining will be stored in accordance with manufacturer's instructions.

9. ALTERNATE CONTROL TECHNIQUES

Vegetation management in Braintree is a primarily mechanical treatment techniques program, as described in the VMP. Decisions on the appropriate control techniques are made following the IVM Protocol and Summary of Control Table in the VMP. The alternate control agreement processes is likewise described in the VMP.

For convenience sake, the IVM Protocol which is based on following a public way integrated vegetation management program is repeated below:

Monitoring*:* All public ways will be surveyed prior to any scheduled treatment program. Monitoring will be conducted by foot or by vehicle. Monitoring of areas may also result from public requests.

Record Keeping: A log of surveyed areas will be kept for future planning and reference purposes. Areas maintained either through physical repair, mechanical or chemical control will be recorded.

Control Methods: The decision to use one or a combination of vegetation control techniques will depend upon the site-specific situation. The management tactics selected will control nuisance vegetation in the most environmentally and efficient manner:

A. Physical Controls

1. Sealing cracks
2. General right-of-way repairs
3. Use of ground cover where appropriate
4. Cleaning ditches
5. Street sweeping

B. Mechanical Controls

1. Selective pruning
2. Ground cutting
3. Mowing

C. Chemical Controls

1. See Section 6.

10. TREATMENT RECORDS

The Category 40 applicator must complete daily vegetation management reports that include:

A. Date, name and address of certified applicator(s)
B. Identification of site or work area
C. List of crew members
D. Type of equipment and hours used
E. Method of application and description of target vegetation
F. Amount, concentration, product name of herbicide(s), adjuvants, and dilutants (EPA registration numbers must be on file)
G. Weather conditions
H. Notation of any unusual conditions or incidents, including public inquiries
I. Recording and/or verification of sensitive areas on town maps

11. REMEDIAL PLAN TO ADDRESS SPILLS AND RELATED ACCIDENTS

This section is offered as a general procedural guide for responding to chemical spills or related accidents (related accidents include but are not limited to fire, poisoning and vehicle accidents). The following is, therefore, a guide to the items that will be available to the applicator on site in the event of a chemical spill or emergency.

Although education and attention will constantly be directed at accident and spill prevention, in the event of a spill, immediate action will be taken to contain the spill and protect the spill area (Appendix D: *Herbicide Spill Check List* shall be available on-site to the applicator). Until completely clean, the spill area will be protected by placing barriers, flagging or crew members at strategic locations, as appropriate. If a fire is involved, care will be taken to avoid breathing fumes from any burning chemicals.

Minor spills will be remedied by soaking up the spill with adsorption clay or other adsorptive material and placed in leak proof containers, removed from the site and disposed of properly. Dry herbicides, will be swept up or shoveled up directly into leak proof containers for proper disposal. When applicable, all contaminated soil will be placed in leak proof containers, removed from the site and disposed of properly. When applicable, activated charcoal will be incorporated into the soil at the spill location at a rate of several pounds per thousand square feet to inactivate any herbicide residue. Any spill will be reported to the DAR Pesticide Division.

The Massachusetts Department of Environmental Protection will be contacted when there is a spill of a reportable quantity, regardless of major or minor spill status and in accordance with 310 CMR 40.0000, Massachusetts Contingency Plan.

Types of Chemical Spills that Require Action

Chemicals include, but are not limited to the following:

- Herbicides
- Bar and Chain Oil
- Motor and Hydraulic Oil/Fluids
- Diesel Fuel
- Gasoline
- Title 3 Hazmat Materials

Required Spill Response Equipment

As a minimum, the treatment crew will have available on the job site:

- YOP with Emergency Contact List
- SDS (Safety Data Sheet)
- Product Label
- Product Fact Sheets (when applicable)
- Appropriate adsorbent material
- Shovel
- Broom
- Flagging
- Leak Proof Container
- Heavy-duty Plastic Bags

Personal Contact

In the event of **Personal Contact** with hazardous chemicals:

- Wash affected area with plenty of soap and water
- Change clothing which has absorbed hazardous chemicals
- If necessary, contact a physician
- If necessary, contact the proper emergency services
- If necessary, follow the procedures for Major or Minor Spills as outlined in Appendix 5
- Avoid breathing the fumes of hazardous chemicals

Reference Tables (information subject to change as necessary)

Table 6: Herbicide Manufacturers

MANUFACTURER	TELEPHONE NUMBER	SPECIAL INSTRUCTIONS
Albaugh Inc.	(800) 247-8013	
BASF Corporation	(800) 832-4357	
Bayer Environmental Science	(800) 334-7577	
Dow Agro Sciences	(800) 992-5994	
Monsanto	(314) 694-4000	
Nufarm	(877) 325-1840	Medical Emergencies

Table 7: State Agencies

STATE AGENCY	TELEPHONE NUMBER	SPECIAL INSTRUCTIONS
Massachusetts Pesticide Bureau	(617) 626-1700	A.S.A.P. (within 48 hours)
Massachusetts Department of Environmental Protection, Emergency Response Section	Main Office: (888) 304-1133 (after hours number) Southeast Region: (508) 946-2700	For emergencies involving reportable quantities of hazardous materials; required info: City/town, street address, site name (if applicable), material
Massachusetts Dept of Public Health, Bureau of Env.Health Assessment Toxilicology Program	(617) 624-5757	
Massachusetts Poison Information Centers	(800) 682-9211	For medical emergencies involving suspected or known pesticide poisoning symptoms

Table 8: Emergency Services

EMERGENCY SERVICE	TELEPHONE NUMBER	SPECIAL INSTRUCTIONS
Massachusetts State Police, Milton Barracks	(617) 698-5840	Framingham, after hours number
ChemTrec	(800) 424-9300	
Clean Harbors	(800) OIL-TANK	
Pesticide Hotline	(800) 858-7378	PST: 6:30 am-4:30 pm, web: www.NPIC.orst.edu

Town of Braintree contact(s) in the case of a spill or accident

Captain Kevin Murphy
Braintree Fire Department
(781)-843-3601 x4006

Appendix A
Map and Street Listing

Town of Braintree 2016 Yearly Operational Plan

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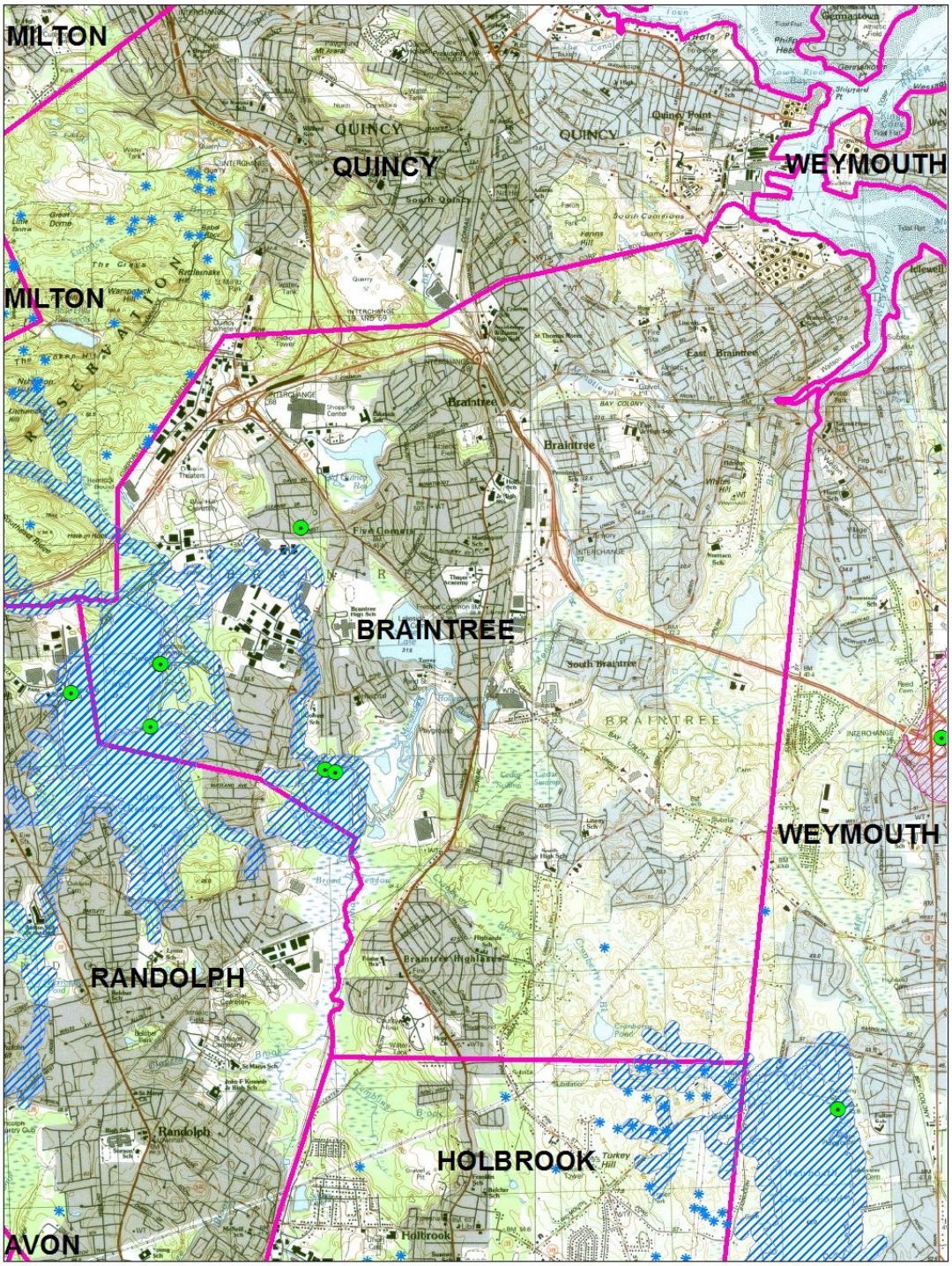
Legend

- Public Wells
- NHESP Certified Vernal Pools
- Zone II
- Zone A
  (identifies surface waterbodies, tributaries and associated wetlands, follow Sensitive Area Assessment methods per 333 CMR 11.04)



Source: "Office of Geographic and Environmental Information (Mass GIS), Commonwealth of Massachusetts, Executive Office of Energy and Environmental Affairs".
Public Water Supply data provided by MA DEP Drinking Water Program, October 2015, DEP Public Water Supplies

March 1, 2016

2016 Street Listing					
ABBOTT STREET	CENTRAL STREET	FRANCINE ROAD	LAKESIDE DRIVE	PARKSIDE CIRCLE	STATEN ROAD
ABBY ROAD	CENTRE STREET	FRANKLIN STREET	LAKEVIEW AVENUE	PARTRIDGE HILL ROAD	STEDMAN AVENUE
ACADEMY STREET	CHARLAM DRIVE	FREDERICK ROAD	LANCASTER ROAD	PATRICIA DRIVE	STELLAR AVENUE
ACORN CIRCLE	CHARLES STREET	FRENCH AVENUE	LANTERN LANE	PATTEN AVENUE	STERLING PARK
ACORN STREET	CHERRY LANE	FRONT STREET	LAUREL ROAD	PAUL STREET	STERLING STREET
ADAMS STREET	CHERRY STREET	GALE AVENUE	LAURIE LANE	PEACH STREET	STETSON STREET
ADDISON STREET	CHESTNUT AVENUE	GARDEN PARK	LAWNVIEW DRIVE	PEAK STREET	STEVENS AVENUE
ALBEE DRIVE	CHICKADEE LANE	GARDNER TERRACE	LAWSON LANE	PEARL PLACE	STONE CREST DRIVE
ALDEN ROAD	CHICKATAWBUT ROAD	GEORGANNA STREET	LEAHAVEN TERRACE	PEARL STREET	STONEWOOD LANE
ALEXANDER ROAD	CHRISTINA DRIVE	GERALDINE LANE	LEDGE ROAD	PENNIMAN TERRACE	STORRS AVENUE
ALFRED ROAD	CHURCH STREET	GILBERT L BEAN DRIVE	LEDGEWOOD ROAD	PENNS HILL AVENUE	STRATHDEE CIRCLE
ALICE ROAD	CINDY LANE	GLENDALE ROAD	LEMOYNE STREET	PEREGRINE ROAD	STRATHMORE CIRCLE
ALIDA ROAD	CIRCUIT ROAD	GLENROSE AVENUE	LENOX DRIVE	PERRY ROAD	STRATHMORE ROAD
ALLEN STREET	CLAREMONT STREET	GORDON ROAD	LIBERTY PARK AVENUE	PETERSON ROAD	SUMMER STREET
ALLERTON COMMONS LANE	CLARK STREET	GRACE ROAD	LIBERTY STREET	PHILLIPS STREET	SUMMIT AVENUE
ALTAIR AVENUE	CLEVELAND AVENUE	GRANDVIEW ROAD	LINCOLN STREET	PHYLLIS AVENUE	SUMMIT RIDGE DRIVE
ALVES AVENUE	CLIFF ROAD	GRANITE STREET	LINDA ROAD	PILGRIM HIGHWAY	SUMNER AVENUE
AMHERST ROAD	CLIFF STREET	GRAY TERRACE	LINDEN STREET	PILGRIM ROAD	SUN VALLEY DRIVE
ANDERSEN ROAD	COCHATO ROAD	GRAZIANO DRIVE	LISLE STREET	PINE AVENUE	SUNNYSIDE LANE
ANDREA DRIVE	COCHETO STREET	GREEN HOUSE WAY	LIVOLI AVENUE	PINECREST ROAD	SUNSET ROAD
ANGELA ROAD	COLBY ROAD	GROSSMAN DRIVE	LOGAN DRIVE	PLAIN STREET	SURRY LANE
ARBORWAY DRIVE	COLUMBIA TERRACE	GROVE CIRCLE	LOGAN ROAD	PLEASANT STREET	SYCAMORE ROAD
ARBUTUS AVENUE	COLUMBIAN STREET	GROVE STREET	LONGWOOD ROAD	PLEASANT VIEW AVENUE	TABER COURT

2016 Street Listing					
ARDMORE STREET	COLUMBUS AVENUE	HALEY AVENUE	LORETTA AVENUE	PLYMOUTH AVENUE	TALBOT ROAD
ARGYLE ROAD	COMMERCE DRIVE	HALL AVENUE	LOUISE ROAD	PLYMOUTH ROAD	TALMADGE AVENUE
ARLINGTON AVENUE	COMMERCIAL COURT	HAMILTON STREET	LOWELL STREET	POND STREET	TAYLOR STREET
ARMSTRONG CIRCLE	COMMERCIAL STREET	HAMMETT PLACE	LUNAR AVENUE	POPLAR STREET	TEABERRY LANE
ARNOLD STREET	COMMON STREET	HANCOCK AVENUE	LUNDQUIST DRIVE	PORTER AVENUE	TENNEY ROAD
ARTHUR STREET	CONGRESS STREET	HANCOCK STREET	MAGNOLIA STREET	PORTLAND ROAD	THAYER AVENUE
ASH STREET	CONNELL STREET	HANNAH NILES WAY	MAIN STREET	POTTER ROAD	THAYER PLACE
ASHWORTH AVENUE	CONNELLY CIRCLE	HARBOR VILLA AVENUE	MANN STREET	POULOS ROAD	THAYER ROAD
ASPINWALL ROAD	CONRAD STREET	HARDING AVENUE	MAPLE STREET	POWDER HILL DRIVE	THE HOMES OF BRAINTREE HILLS
ATHERTON STREET	COOLIDGE AVENUE	HARNESS LANE	MAPLEWOOD TERRACE	PRENTIS ROAD	THETFORD AVENUE
ATLAS ROAD	COTTON AVENUE	HARRISON AVENUE	MARCIA ROAD	PRESCOTT LANE	THORNDIKE STREET
AUDUBON AVENUE	COURT ROAD	HARVEST LANE	MARGARET DRIVE	PRESCOTT ROAD	TILDEN COMMONS LANE
AUTUMN STREET	CRANMORE ROAD	HATCH AVENUE	MARIANNE AVENUE	PRESIDENT ROAD	TINGLEY CIRCLE
AVON PLACE	CRAWFORD ROAD	HAVEN ROAD	MARIETTA AVENUE	PRIMROSE STREET	TINGLEY ROAD
AZEL ROAD	CRAWFORD STREET	HAWTHORN ROAD	MARINELLI COURT	PRISCILLA AVENUE	TOMPSON ROAD
B V FRENCH STREET	CRESCENT AVENUE	HAYWARD AVENUE	MARION AVENUE	PROCTOR ROAD	TORREY ROAD
BAKER AVENUE	CROSS ROAD	HAYWARD STREET	MARISA DRIVE	PROSPECT STREET	TOTNES ROAD
BARSTOW DRIVE	CYPRESS STREET	HAZEL COURT	MARJORIE ROAD	PROSPECT STREET NORTH	TOWER HILL ROAD
BAY STATE DRIVE	DANIEL ROAD	HEDLUND AVENUE	MARSHALL STREET	PURGATORY ROAD	TOWN STREET
BAYBERRY LANE	DANIELLE LANE	HELEN ROAD	MARSHFIELD ROAD	PUTNAM AVENUE	TOWNSEND AVENUE
BEALS ROAD	DAVIS ROAD	HEMLOCK STREET	MASSACHUSETTS AVENUE	QUINCY AVENUE	TRAINOR DRIVE
BEECH STREET	DEAN STREET	HERBERT ROAD	MATTHEW CIRCLE	RAILROAD STREET	TREFTON DRIVE

2016 Street Listing					
BEECHWOOD ROAD	DEARING AVENUE	HERITAGE LANE	MATTHEW COURT	RALEIGH ROAD	TREMONT STREET
BELKNAP ROAD	DEBORAH LANE	HEWMASON ROAD	MATTHEW LANE	RANDALL AVENUE	TURTLE CROSSING
BELLEVUE AVENUE	DEIGAN AVENUE	HICKORY ROAD	MATTHEW WOODS DRIVE	RAY LANE	TYSON COMMONS LANE
BELLEVUE ROAD	DELTA ROAD	HIGHLAND AVENUE	MAY AVENUE	REED HILL ROAD	UNION PLACE
BELMONT STREET	DEVON COMMONS LANE	HIGHLAND AVENUE EAST	MAY STREET	REGIS ROAD	UNION STREET
BERWICK STREET	DEVON ROAD	HIGHLAND ROAD	MAYFLOWER ROAD	RESERVOIR AVENUE	UNION STREET ROTARY
BESTICK ROAD	DEVON WOODS DRIVE	HIGHVIEW AVENUE	MCANDREW ROAD	RESERVOIR CIRCLE	UPLAND ROAD
BEVERLY COURT	DEWEY AVENUE	HILL AVENUE	MCCUE DRIVE	REX DRIVE	VENUS ROAD
BICKFORD ROAD	DEWEY ROAD	HILL VIEW ROAD	MCCUSKER DRIVE	RICHARD ROAD	VERANDA ROAD
BIRCH STREET	DICKERMAN LANE	HILLCREST ROAD	MCGIBBON WAY	RICHARDI LANE	VERNON STREET
BIRCHCROFT ROAD	DIVISION STREET	HILLIARD COURT	MEADOWBROOK ROAD	RITA ROAD	VICTORIA AVENUE
BLAKE ROAD	DOBSON ROAD	HILLSDALE AVENUE	MEGANS WAY	RIVER STREET	VIEW STREET
BLANCHARD BOULEVARD	DONATA ROAD	HILLSIDE AVENUE	MERRITT AVENUE	ROBBIE ROAD	VINE STREET
BLOSSOM ROAD	DORIS ROAD	HILLSIDE ROAD	MESSINA DRIVE	ROBERT STREET	VINEDALE ROAD
BLUEBERRY DRIVE	DOVE DRIVE	HINGSTON CIRCLE	MESSINA WOODS DRIVE	ROBINSON AVENUE	VINTON AVENUE
BONNIEVIEW ROAD	DRAKE STREET	HOBART AVENUE	MICHELE LANE	ROCKDALE STREET	VIRGINIA ROAD
BOSCOBEL STREET	DRINKWATER AVENUE	HOBART STREET	MIDDLE STREET	ROCSAM PARK ROAD	WALDRON ROAD
BOWDITCH STREET	DYER AVENUE	HOBART TERRACE	MILL LANE	ROGERS CIRCLE	WALNUT AVENUE
BOWER ROAD	EAST BOSCOBEL STREET	HOLBROOK AVENUE	MILLER AVENUE	ROINE ROAD	WALNUT STREET
BOYLSTON STREET	EDGEHILL ROAD	HOLDEN ROAD	MILLER STREET	ROME DRIVE	WAMPATUCK ROAD
BRADFORD COMMONS LANE	EDGEMONT ROAD	HOLLINGSWORTH AVENUE	MILTON ROAD	ROOSEVELT STREET	WARREN AVENUE

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BRADFORD ROAD	EDWARDS ROAD	HOLLIS AVENUE	MONATIQUOT AVENUE	ROSE AVENUE	WASHINGTON PARK ROAD
BRADLEE CIRCLE	EILEEN DRIVE	HOLLY ROAD	MORELAND AVENUE	ROSEDALE AVENUE	WASHINGTON PLACE
BRADLEY ROAD	ELEANOR DRIVE	HOLMES STREET	MORRISON ROAD	ROSEWOOD DRIVE	WASHINGTON STREET
BRADLEY ROAD EXTENSION	ELLERY STREET	HOME PARK ROAD	MORRISON STREET	ROSS WAY	WATER STREET
BRAEMORE ROAD	ELLIOT STREET	HONORABLE THOMAS S BURGIN PARKWAY	MOUNT VERNON AVENUE	ROYAL LAKE DRIVE	WATSON STREET
BRAINTREE HILL PARK	ELLIS LANE	HOOKER STREET	MOUNT VERNON STREET	RUSSELL ROAD	WAYNE AVENUE
BRAMBLEWOOD LANE	ELLSMORE TERRACE	HOOVER AVENUE	MYRTLE AVENUE	SAFFORD STREET	WEBB STREET
BRAXTON STREET	ELLSWORTH STREET	HOWARD COURT	MYRTLE STREET	SAGAMORE STREET	WEBSTER ROAD
BREGOLI LANE	ELM KNOLL ROAD	HOWARD PLACE	NELSON STREET	SAINT CLAIRE STREET	WELLINGTON STREET
BREWSTER AVENUE	ELM STREET	HOWARD STREET	NEWPORT AVENUE	SAINT LAWRENCE STREET	WEST STREET
BRIERWOOD ROAD	ELM STREET BRANCH	HOWIE ROAD	NEWTON AVENUE	SAINT MICHAEL ROAD	WESTON AVENUE
BROOKS DRIVE	ELM TERRACE	HUNT AVENUE	NEWTON STREET	SAMPSON AVENUE	WESTON COURT
BROOKSIDE ROAD	ELMLAWN ROAD	HUNTLEY ROAD	NICHOLAS ROAD	SAMPSON PLACE	WHITE HILLS DRIVE
BROW AVENUE	ELMWOOD AVENUE	IDA ROAD	NICKERSON ROAD	SAMPSON STREET	WHITE ROAD
BUKER CORNER LANE	ELMWOOD PARK	INDEPENDENCE AVENUE	NORFOLK ROAD	SCHOOL STREET	WHITTIER ROAD
BURROUGHS ROAD	EMERALD AVENUE	INGLEWOOD STREET	NORTH BOWDITCH STREET	SCHOOL STREET WEST	WILDWOOD AVENUE
BURTON ROAD	ERICKSON STREET	INTERSTATE 93	NORTH STREET	SCOTT LANE	WILKINS ROAD
BUSHNELL TERRACE	ESTHER STREET	IVORY STREET	NORTON STREET	SELWYN ROAD	WILLARD STREET
BUTLER ROAD	EUTAW AVENUE	JAY STREET	OAK HILL ROAD	SHAW AVENUE	WILLIAMS COURT
CABOT AVENUE	EVELYN LANE	JEFFERSON STREET	OAK LEDGE DRIVE	SHAW STREET	WILLIAMS STREET
CAIN AVENUE	EVERGREEN AVENUE	JENSEN FARM ROAD	OAK STREET	SHEFFIELD DRIVE	WILLOW STREET
CAIRN STREET	FABIANO DRIVE	JERSEY AVENUE	OAK STREET EAST	SHEPARD ROAD	WILMARTH ROAD

2016 Street Listing					
CALVIN STREET	FAIRFIELD STREET	JOHN F KENNEDY MEMORIAL DRIVE	OAKDEN AVENUE	SHEPPARD AVENUE	WILSON AVENUE
CAMEO ROAD	FAIRMOUNT AVENUE	JOHN PAUL CIRCLE	OAKLAND STREET	SHERATON AVENUE	WINDEMERE CIRCLE
CAMPANELLI DRIVE	FAIRVIEW AVENUE	JOHN W MAHAR HIGHWAY	OLD CARRIAGE LANE	SHERBROOKE AVENUE	WINSLOW ROAD
CANAL STREET	FAIRVIEW STREET	JOHNSON LANE	OLD COACH ROAD	SHERIDAN ROAD	WINTER STREET
CANAVAN DRIVE	FALLON CIRCLE	JORDAN CIRCLE	OLD COUNTRY WAY	SHERMAN ROAD	WINTHROP AVENUE
CANDLEWOOD LANE	FARM RIVER DRIVE	JOSEPH ROAD	OLD ELM STREET	SILVER ROAD	WINTHROP ROAD
CAPE COD LANE	FARM ROAD	JUDSON STREET	OLD LIBERTY STREET	SKYLINE DRIVE	WOOD ROAD
CAPEN ROAD	FAULKNER PLACE	KELLEY DRIVE	OLD VALLEY ROAD	SMITH STREET	WOODEDGE AVENUE
CARDINAL COURT	FAXON STREET	KENDALL AVENUE	OLOFSON STREET	SMITH TERRACE	WOODEDGE CIRCLE
CAROLYNE AVENUE	FEDERAL DRIVE	KENMORE ROAD	ORCHARD STREET	SOLAR AVENUE	WOODEDGE LANE
CARTER ROAD	FERN ROAD	KENNING TERRACE	OREGON AVENUE	SOMERVILLE AVENUE	WOODLAND ROAD
CATHERINE DRIVE	FERNCROFT ROAD	KENSINGTON STREET	O'TOOLE TERRACE	SOPER HOUSE LANE	WOODSIDE AVENUE
CAVANAUGH ROAD	FL WRIGHT CONNECTOR	KEW ROAD	PACKARD DRIVE	SOUTH STREET	WOODSUM DRIVE
CEDAR AVENUE	FORBES ROAD	KIMBALL ROAD	PANTANO STREET	SPENCER STREET	WORTHINGTON CIRCLE
CEDAR STREET	FOREST STREET	KIMBERLY LANE	PARK AVENUE	SPRING GLEN CIRCLE	WYMAN ROAD
CEDARCLIFF ROAD	FOSTER ROAD	KING HILL ROAD	PARK STREET	SPRING STREET	WYNOT ROAD
CELIA ROAD	FOUNTAIN STREET	KIRBY STREET	PARKINGWAY STREET	SPRUCE STREET	ZANA PARK DRIVE
CENTRAL AVENUE	FOX HILL DRIVE	LAKE STREET	PARKSIDE AVENUE	STANDISH AVENUE	

Appendix B: Herbicide Fact Sheets

Glyphosate:
http://www.mass.gov/eea/docs/agr/pesticides/rightofway/docs/glyphosate-2011.pdf

Imazapyr:
http://www.mass.gov/eea/docs/agr/pesticides/rightofway/docs/imazapyr-2011.pdf

Metsulfuron-methyl:
http://www.mass.gov/eea/docs/agr/pesticides/rightofway/docs/metsulfuron-methyl-2011.pdf

Sulfometuron-methyl:
http://www.mass.gov/eea/docs/agr/pesticides/rightofway/docs/sulfometuron-methyl-2011.pdf

Triclopyr:
http://www.mass.gov/eea/docs/agr/pesticides/rightofway/docs/triclopyr-2011.pdf

Appendix C: Herbicide Labels

ESCORT XP:
HTTP://WWW.CDMS.NET/LDAT/LD5QT029.PDF
HTTP://WWW.CDMS.NET/LDAT/LDCFM000.PDF

GARLON 4 ULTRA:
HTTP://WWW.CDMS.NET/LDAT/LD7IN006.PDF

KRENITE S:
HTTP://WWW.CDMS.NET/LDAT/LDB94000.PDF

OUST XP:
HTTP://WWW.CDMS.NET/LDAT/LD5FQ017.PDF
HTTP://WWW.CDMS.NET/LDAT/LDCG4000.PDF

POLARIS
HTTP://WWW.CDMS.NET/LDAT/LD8KR002.PDF

RODEO:
HTTP://WWW.CDMS.NET/LDAT/LD4TN009.PDF

ROUNDUP PRO:
HTTP://WWW.CDMS.NET/LDAT/LD07A016.PDF

Appendix D: Herbicide Spill Check List

REPORTABLE SPILLS (Spills of reportable quantity of material): FOLLOW STEPS 1-10
NON-REPORTABLE SPILLS: FOLLOW STEPS 1, 2, 3, 4, 7, 8, 9,10 & 11 as appropriate and contact the Braintree representative.

Order	ACTION		Done (√)
1	Use any and all PPE as directed by product label or SDS.		
2	Cordon-off spill area to unauthorized people and traffic to reduce the spread and exposure of the spill		
3	Identify source of spill and apply corrective action, if possible stop or limit any additional amounts of spilled product.		
4	Contain spill and confine the spread by damming or diking with soil, clay or other absorbent materials.		
5	Report spills of "reportable quantity" to the Mass. DEP and DAR:		
	Massachusetts DAR, Pesticide Bureau	(617) 626-1700	
	Massachusetts Department of Environmental Protection, Emergency Response Section	Main Office: (888) 304-1133 (after hours number)	
		Southeast Region: (508) 946-2700	
6	If the spill cannot be contained or cleaned-up properly, or if there is a threat of contamination to any bodies of water, immediately contact any of the following applicable emergency response personnel:		
	local fire, police, rescue	911	
	Braintree Representative: **Daryn Brown**	(781) 314-3800	
	Braintree Fire Department: **Captain Kevin Murphy**	((781)-843-3601 x4006	
	Product manufacturer(s)		
	1	1	
	2	2	
	3	3	
	Chemtrec	(800) 424-9300	
	additional emergency personnel		
	If there is a doubt as to who should be notified, contact State Police, Milton Barracks.	(617) 698-5840	
7	Remain at the scene to provide information and assistance to responding emergency clean-up crews		
8	Refer to the various sources of information relative to handling and cleanup of spilled product		
9	If possible, complete the process of "soaking up" with absorbent materials		
10	Sweep or shovel contaminated products and soil into leak proof containers for proper disposal at approved location		
11	Spread activated charcoal over spill area to inactivate any residual herbicide		